

In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A method for producing tissue cells wherein the tissue cells are myocardial cells, the method comprising the steps of:
 - (i) an iris-tissue-extirpating step of extirpating iris tissue from the eyeball of the animal;
 - (ii) an iris-pigmented-epithelial-cell-separating step of separating iris pigmented epithelium from the iris tissue thus extirpated;
 - (iii) dissociating the separated iris pigmented epithelium using a trypsin solution;
 - (iv) obtaining pluripotent stem cells by selectively culturing iris pigment epithelial cells by a floated coagulated mass culturing technique, the iris pigmented epithelial cells separated by the steps (i)-(iii) being isolated from an eyeball of an animal; and
 - (v) obtaining tissue cells from the pluripotent stem cells by differentiating the pluripotent stem cells into one or more types of tissue cells by culturing the pluripotent stem cells under differentiation inducing conditions.
2. (original) The method according to Claim 1, wherein the animal is a chicken, a mouse, a rat, or a human.
3. (previously presented) The method according to Claim 1, wherein the animal is a postnatal individual animal.
4. (previously presented) The method according to Claim 1, wherein the pluripotent stem cells are Oct-3/4 positive and/ or tridermic differentiable.
5. (cancelled)

6. (currently amended) The method according to Claim 1 5, wherein the iris-tissue-extirpating step includes:

an iris-tissue-excising stage of excising only iris tissue from the eyeball of the animal;

an enzyme treatment stage of subjecting the excised iris tissue to enzyme treatment; and

an iris-tissue-restoring stage of restoring, by using a culture medium containing serum, the iris tissue weakened by the enzyme treatment.

7. (cancelled)

8. (previously presented) The method according to Claim 1, wherein the culturing under the differentiation inducing condition is conducted with serum.

9. (original) The method according to Claim 8, wherein the serum is fetal calf serum or avian serum.

10. (previously presented) The method according to Claim 9, wherein, in the culturing under the differentiation inducing condition, a growth factor is further used.

11. (original) The method according to Claim 10, wherein the growth factor is EGF or FGF.

12. (withdrawn) Tissue cells obtained by the method according to claim 1.

13. (withdrawn) The tissue cells according to claim 13, wherein the tissue cells are ectodermal cells or cells derived from ectoderm, mesodermal cells or cells derived from mesoderm, or endodermal cells or cells derived from endoderm.

14. (withdrawn) The tissue cells according to claim 13, wherein the tissue cells forms tissue forming an intravital organ.

15-16. (cancelled)

17. (previously presented) The method of claim 1, further comprising testing for expression of at least one gene specific for myocardial cells.

18. (previously presented) The method of claim 17, wherein the gene specific for myocardial cells is selected from the group consisting of GATA4, Nkx2.5, cMyBP, and myosin.

19-25. (cancelled)

26. (new) The method according to Claim 6, wherein in the enzyme treatment step, the iris tissue is treated in a dispase solution and then treated in an EDTA solution.

27. (new) The method according to Claim 6, wherein in the iris-restoring step, the iris tissue is treated in a culture medium comprising fetal calf serum.